REMARKS/ARGUMENTS

Applicant has received the Office Action dated July 15, 2003, in which the Examiner: (1) rejected claims 1-2 under 35 U.S.C. § 112, 2nd paragraph; (2) rejected claims 1-3 and 5 under 35 U.S.C. § 103(a) as being obvious over U.S. Patent No. 6,314,114 (*Coyle et al.*) in view of U.S. Patent No. 6,560,634 (*Broadhurst*) and U.S. Patent No. 6,182,109 (*Sharma et al.*); (3) rejected claims 4, 6-9, and 12-14 as obvious over *Coyle* in view of *Broadhurst, Sharma,* and U.S. Patent No. 6,173,246 (*Billups, III*); (4) rejected claims 10-11 and 16-19 as obvious over *Coyle* in view of *Broadhurst, Sharma, Billups,* and U.S. Patent No. 5,910,951 (*Pearce et al.*); (5) rejected claims 15 and 20-23 as obvious over *Coyle* in view of *Broadhurst, Sharma,* and *Pearce*; (6) rejected claims 24-26 as obvious over *Broadhurst* in view of *Sharma* and *Pearce*; (7) rejected claims 27-28 as obvious over *Broadhurst* in view of *Sharma, Pearce,* and *Billups;* and (8) rejected claims 29-30 as obvious over *Broadhurst* in view of U.S. Patent No. 6,108,309 (*Cohoe*).

Applicant has amended claims 1, 15, 24, 27, and 29-30 and canceled claims 25-26. Based on the arguments and amendments contained herein, Applicant believes the pending claims are allowable over the art of record and respectfully requests reconsideration.

I.   The § 112, 2nd Paragraph, Rejections

The Examiner noted a typographical error with claim 1 and an antecedent basis issue with claim 2. Applicant amends claim 1 to replace "processors" with processes" and changed "communication link" to communications link." Applicant believes claims 1-2 should be allowable over § 112, 2nd paragraph.

II.   The § 103(a) Rejections

A.   Claim 1

The Examiner rejected claim 1 as being obvious over the combination of *Coyle, Broadhurst,* and *Sharma.* Claim 1 is directed to a parallel processing network that includes, among other features, process spawning logic that "determines whether sufficient processors are available to spawn the processes and, if not, spawns a reduced number of processes based on the number of available processors."

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The Examiner concedes that Coyle and Sharma do not teach the
reduction of processes based on the number of available processors. The
Examiner, however, apparently contends that Broadhurst teaches the reduction
of processes based on the number of available resources. Applicant respectfully
traverses this contention based on the following reasons.

First, Broadhurst teaches that "depending on the load of query server 104,
search engine 226 may change the number of search sub-processes to spawn"
(Col. 5, lines 62-64). The load of query server 104 does not represent or even
suggest the number of available processors, as required by claim 1. As one of
ordinary skill in the art is aware, the load of a server is different than the number
of available processors.

Second, the query server in the Broadhurst reference is a single processor
system (Col. 4, line 1). As required by claim 1, the reduction in processes is
based on the number of available processors. Broadhurst does not teach or even
imply the use of more than one processor. Thus, Broadhurst does not and, in
fact, cannot teach reducing the number of processes based on the number of
available processors.

For any or all of the foregoing reasons, Applicant respectfully submits that
claim 1 and claims 2-14, which depend from claim 1, should be allowed.

B.   Claim 5

The Examiner rejected claim 5 as being obvious over the combination of
Coyle, Broadhurst, and Sharma. Claim 5 depends from claim 1 and is allowable
for at least the reasons provided above for claim 1. Further, claim 5 requires that
the "user specified criteria also includes a maximum number of CPUs to be used
per machine to execute processes."

The Examiner concedes that Coyle and Broadhurst do not teach the use
of a maximum number of CPUs to be used per machine, however apparently
contends that Sharma teaches the use of the maximum number of CPUs to be
used per machine. However, Sharma teaches that the "maximum number of
execution units is an upper bound to support a peak client load without
overloading the server system." (Col. 2, lines 44-46) Sharma does not teach,

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suggest, or even imply that the user parameters include the maximum number of CPUs, as required by claim 5. For this additional reason, Applicant respectfully submits that claim 5 should be allowed.

C.   Claim 15

The Examiner rejected claim 15 as being obvious over the combination of *Coyle, Broadhurst, Sharma,* and *Pearce.* Claim 15 has been amended and is now directed to a parallel processing network that includes, among other features, process spawning logic that "determines whether a sufficient number of processors are available to permit the user desired number of processes to be spawned in accordance with the user specified parameters and, if not, spawns a reduced number of processes based on the number of available processors."

The Examiner concedes that *Coyle, Sharma,* and *Pearce* do not teach the reduction of processes based on the number of available processors, however apparently contends that *Broadhurst* teaches the reduction of processes based on the number of available resources. Applicant respectfully traverses this contention based upon the reasons provided above regarding claim 1. That is, *Broadhurst* does not disclose the use of more than one processor or the reduction of processes based on the number of available processors.

For any or all of the foregoing reasons, Applicant respectfully submits that claims 15 and 16-19, which depend from claim 15, should be allowed.

D.   Claim 19

The Examiner rejected claim 19 as being obvious over the combination of *Coyle, Broadhurst, Sharma* and *Pearce.* Claim 19 depends from claim 15 and is allowable for the same reasons as claim 15. Further claim 19 requires that the "user parameters include a maximum number of CPUs to use per machine for spawning processes."

The Examiner concedes that *Coyle, Broadhurst,* and Pearce do not teach the use of a maximum number of CPUs to be used per machine, however apparently contends that *Sharma* teaches the use of the maximum number of CPUs to be used per machine. However, *Sharma* teaches that the "maximum number of execution units is an upper bound to support a peak client load without

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overloading the server system." (Col. 2, lines 44-46) *Sharma* does not teach, suggest, or even imply that the user parameters include the maximum number of CPUs, as required by claim 19. Thus, Applicant respectfully submits that claim 19 should be allowed.

E.   Claim 20

The Examiner rejected claim 20 as being obvious over the combination of *Coyle*, *Broadhurst*, *Sharma* and *Pearce*. Claim 20 is directed to a computer readable storage medium that includes, among other features, "a means for spawning a number of processes that is reduced based on the number of available CPUs."

The Examiner concedes that *Coyle* and *Sharma* do not teach the reduction of processes based on the number of available processors, however apparently contends that *Broadhurst* teaches the reduction of processes based on the number of available resources. Applicant respectfully traverses this contention based upon the reasons provided above regarding claim 1. That is, *Broadhurst* does not disclose the use of more than one processor or the reduction of processes based on the number of available processors.

For any or all of the foregoing reasons, Applicant respectfully submits that claim 20 and 21-23, which depend from claim 20, should be allowed.

F.   Claim 24

The Examiner rejected claim 24 as being obvious over the combination of *Broadhurst*, *Sharma* and *Pearce*. Method claim 24 has been amended to require, among other features, "creating processes if a sufficient number of processors are available and, if a sufficient number of processors are not available, creating a number of processes."

Applicant believes that pending claim 24 is allowable over the art of record for the same reasons given above regarding claim 1. That is, *Broadhurst* does not disclose the use of more than one processor or the reduction of processes based on the number of available processors.

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G.   Claim 29

The Examiner rejected claim 29 as being obvious over the combination of *Broadhurst*, *Sharma* and *Pearce*. Method claim 29 has been amended to require, among other features, "spawning a reduced number of processes automatically or in accordance with the process group file based on a available number of available processors."

Applicant believes that pending claim 29 is allowable over the art of record for the same reasons given above regarding claim 1. That is, *Broadhurst* does not disclose the use of more than one processor or the reduction of processes based on the number of available processors.

III.   Additional Amendments to Claims 24 and 29

Applicant has amended claims 24 and 29 to remove all reference to the labels "(a)," "(b)" and "(c)" to ensure that the order of the limitations listed in claim 24 and 29 does not imply that the claimed method is limited to that precise order. Applicant made corresponding amendments to dependent claims 25-27 and 30. Further, Applicant removed references to "the step" in claims 24 and 29 to ensure that such claims are not interpreted under the dictates of 35 U.S.C. § 112, sixth paragraph.
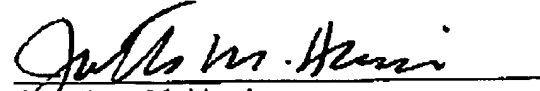
IV.   Conclusion

In the course of the foregoing discussions, Applicant may have at times referred to claim limitations in shorthand fashion, or may have focused on a particular claim element. This discussion should not be interpreted to mean that the other limitations can be ignored or dismissed. The claims must be viewed as a whole, and each limitation of the claims must be considered when determining the patentability of the claims. Moreover, it should be understood that there may be other distinctions between the claims and the prior art which have yet to be raised, but which may be raised in the future.

If any fees or time extensions are inadvertently omitted or if any fees have been overpaid, please appropriately charge or credit those fees to Hewlett-Packard Company Deposit Account Number 08-2025 and enter any time extension(s) necessary to prevent this case from being abandoned.

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       Applicant respectfully requests that a timely Notice of Allowance be issued
in this case.

                                                  Respectfully submitted,

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